APPENDIX C

TRACK AND FIELD

C-1. 400 meter running track (see fig C-1 and fig C-2)

a. Source of information. The Athletic Congress.

b. Recommended area. Ground space is approximately 4.1 acres.

c. Size and dimension. Radius to trackside face of curb is 31.533 m (103.44 feet). Track width is 8.534 m (28 feet) for 8 lanes 1.067 m (3.50 feet) wide each.

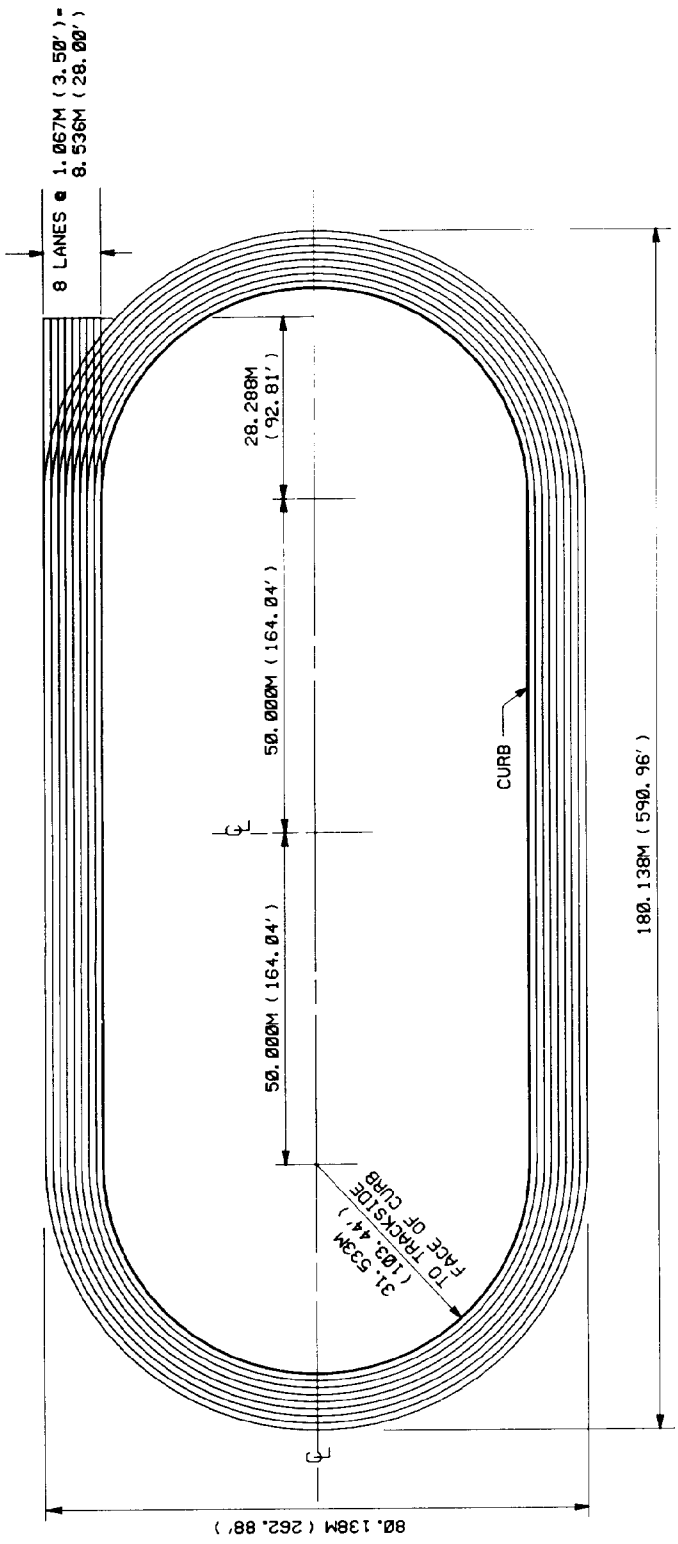
d. Orientation. The track will be oriented with the long axis in a sector from north-northwest to south-southeast. The finish line will be on the north.

e. Surface and drainage.

(1) Track surface is to be preferably bituminous material with a hot plant cushion course mix. Protective colorcoating is optional.

(2) Maximum slopes for the running track are 2 percent (1:50) inward in the center of curves, 1 percent (1:100) inward in the straightaways and 0.1 percent (1:1000) in the running direction.

f. Special consideration. Drainage must be provided for the track surface, but will be dependent upon site grading.



400-METER RUNNING TRACK LAYOUT

NOTES:

Lane #1 is innermost lane.

Instructions can be ordered from NCAA for marking 400-meter track events on an existing 1/4-mile track.

See figure C-2 for location of lane measurement lines and other track data.

Figure C-1. 400 meter running track.

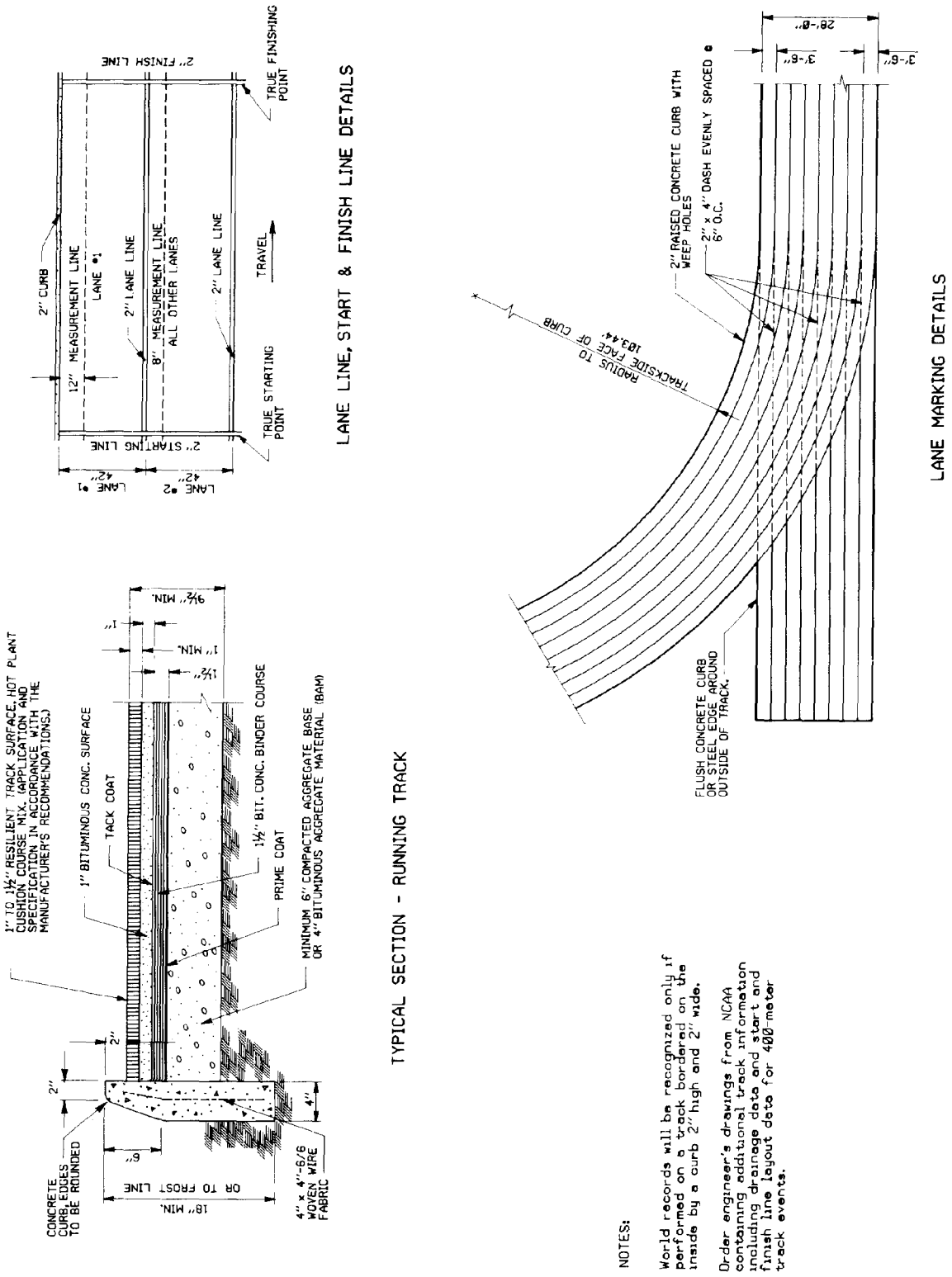


Figure C-2. 400 meter running track detail.

C-2. Shot Put (see fig C-3)

a. Source of information. The Athletic Congress.

b. Recommended area. Ground space is 2,100 square feet (0.05 acre) minimum.

c. Size and dimension. Shot Put circle is 7 feet 0 inch (2.134 m) in diameter. Throwing sector is 40-degree angle and 70 feet (21.33 m) minimum radius.

d. Orientation. Preferred orientation is for the throwing direction to be toward the northeast quadrant.

e. Surface and drainage. Surface of inner circle is to be concrete or similar material. Throwing sector is to be turf at the same level as the top of the metal ring.

f. Special consideration.

(1) Stopboard must be firmly fixed so that its inner edge coincides with the inner edge of the Shot Put circle.

(2) Sector flags are required to mark end of landing zone at distance required by the competition.

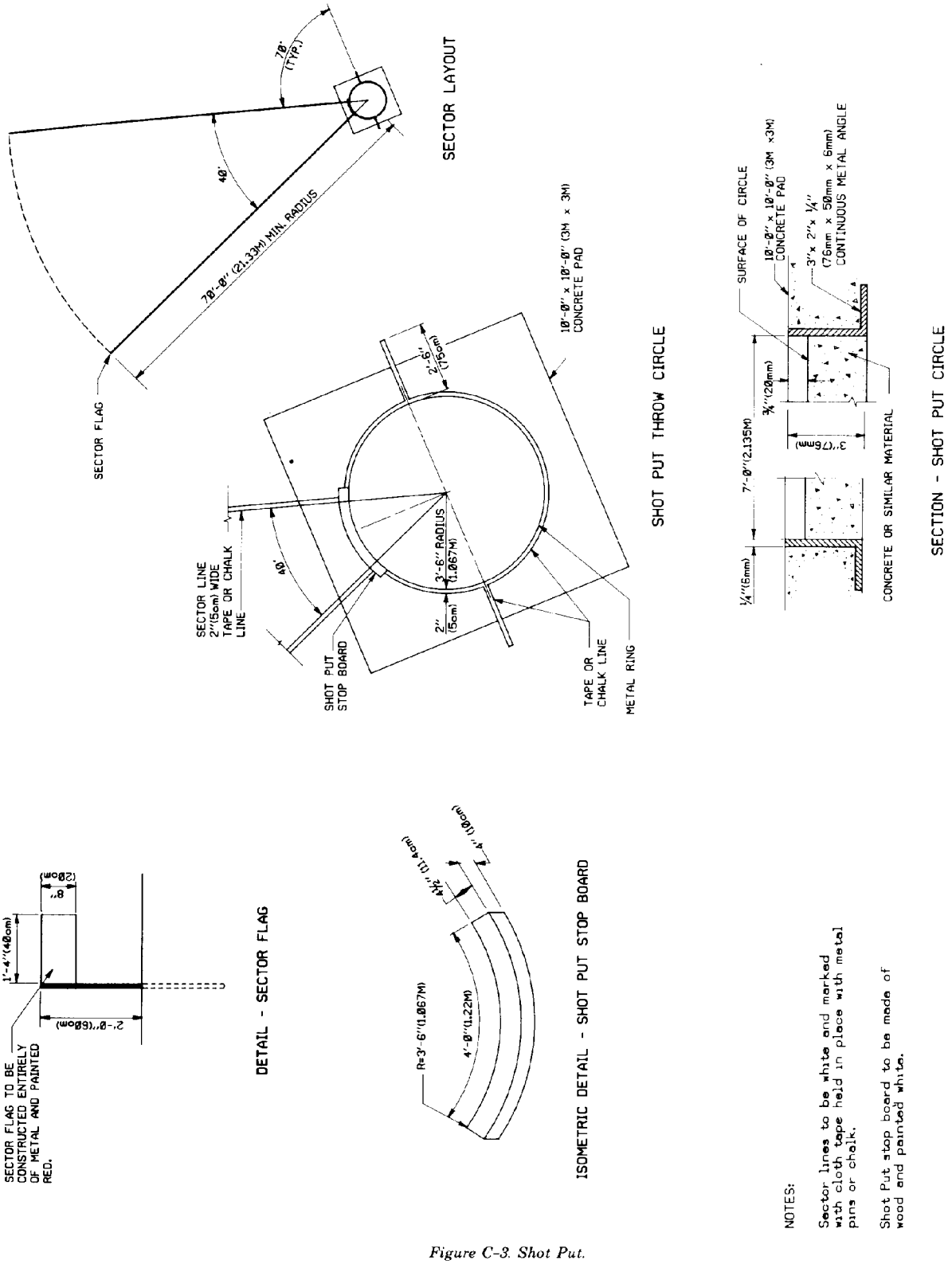


Figure C-3. Shot Put.

C-3. Hammer throw (see fig C-4)

a. Source of information. The Athletic Congress.

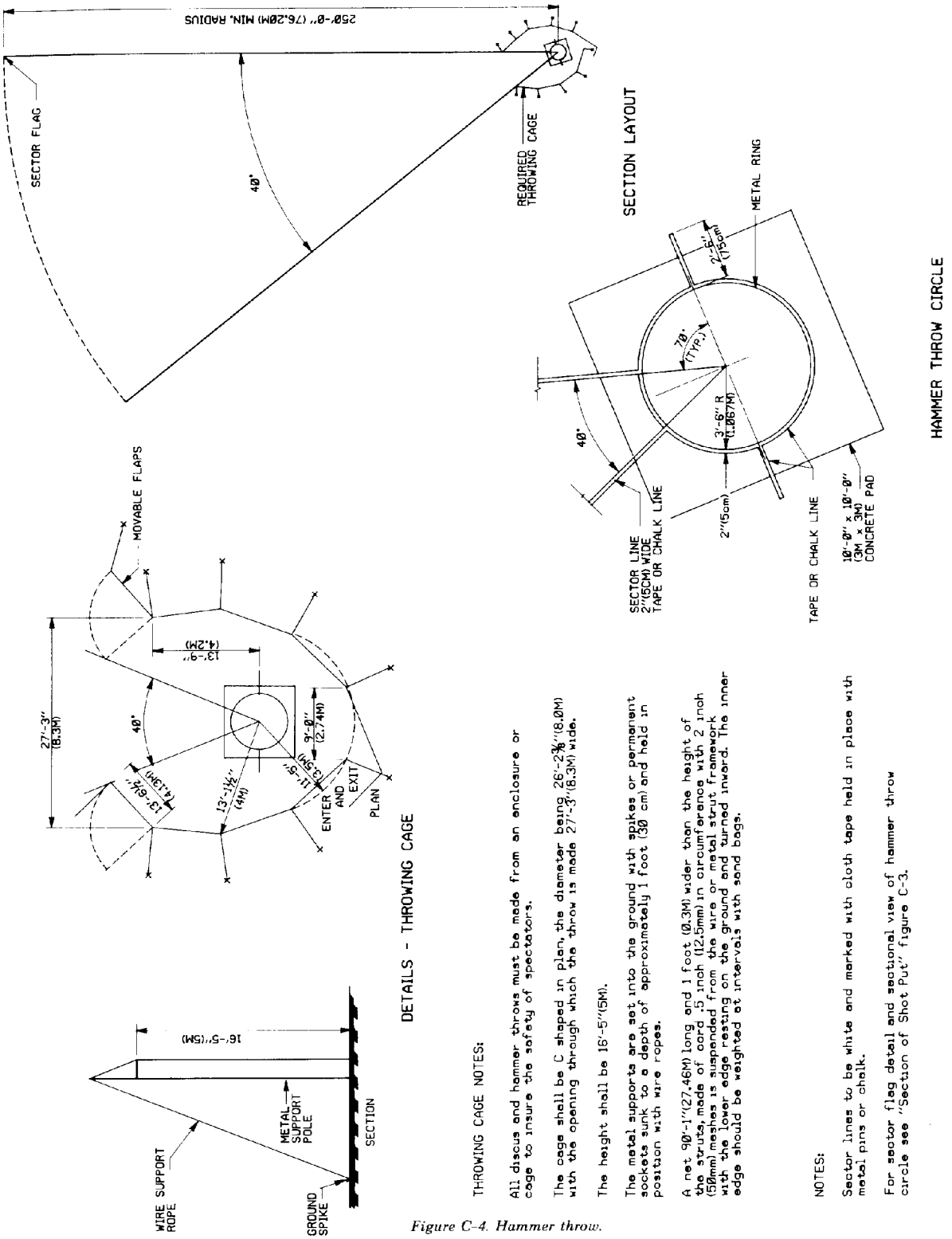
b. Recommended area. Ground space is 23,000 square feet (0.5 acre) minimum.

c. Size and dimension. Hammer throw circle is 7 feet 0 inch (2.134 m) in diameter. Throwing sector is 40-degree angle and 250 feet (76.20 m) minimum radius.

d. Orientation. Preferred orientation is for the throwing direction to be toward the northeast quadrant.

e. Surface and drainage. Throwing sector is to be turf at the same level as the top of the metal ring.

f. Special considerations. Section flags are required to mark end of landing zone at distance required by the competition.



THROWING CAGE NOTES:

All discus and hammer throws must be made from an enclosure or cage to insure the safety of spectators.

The cage shall be C shaped in plan, the diameter being 26'-2⅜"(8.0M) with the opening through which the throw is made 27'-3"(8.3M) wide.

The height shall be 16'-5"(5M).

The metal supports are set into the ground with spikes or permanent sockets sunk to a depth of approximately 1 foot (30 cm) and held in position with wire ropes.

A net 90'-1"(27.46M) long and 1 foot (0.3M) wider than the height of the struts, made of cord .5 inch (12.5mm) in circumference with 2 inch (50mm) meshes is suspended from the wire or metal strut framework with the lower edge resting on the ground and turned inward. The inner edge should be weighted at intervals with sand bags.

NOTES:

Sector lines to be white and marked with cloth tape held in place with metal pins or chalk.

For sector flag detail and sectional view of hammer throw circle see "Section of Shot Put" figure C-3.

Figure C-4. Hammer throw.

C-4. Discus throw (see fig C-5).

a. Source of information. The Athletic Congress.

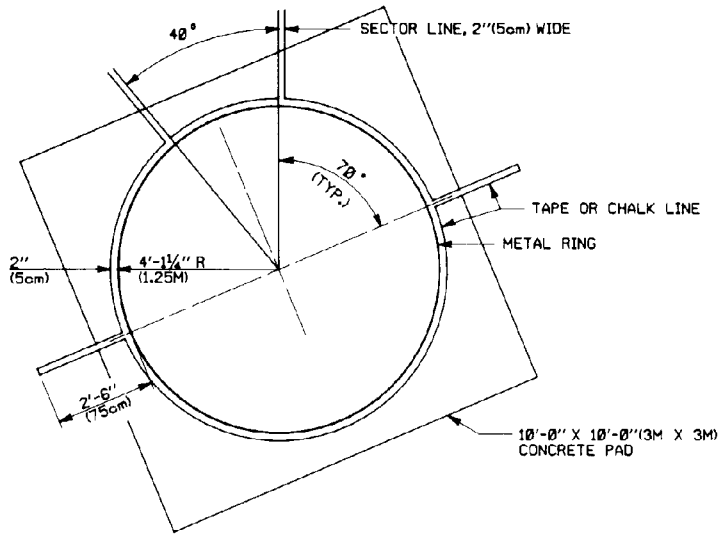
b. Recommended area. Ground space is 18,100 square feet (0.4 acre) minimum.

c. Size and dimension. Discus throwing circle is 8 feet 2-½ inch (2.50 m) in diameter. Throwing sector is 40-degree angle and 220 feet (67.06 m) minimum radius.

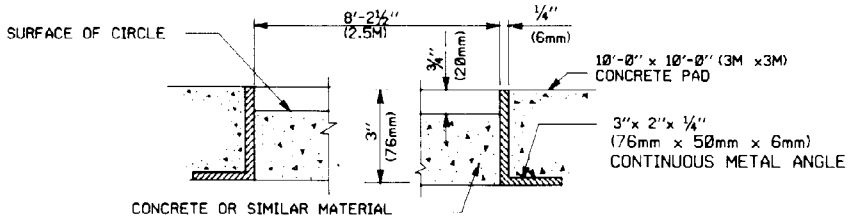
d. Orientation. Preferred orientation is for the throwing to be toward the northeast quadrant.

e. Surface and drainage. Throwing sector is to be turf at the same level as the top of the metal ring.

f. Special considerations. Sector flags are required to mark end of landing zone at distance required by the competition.

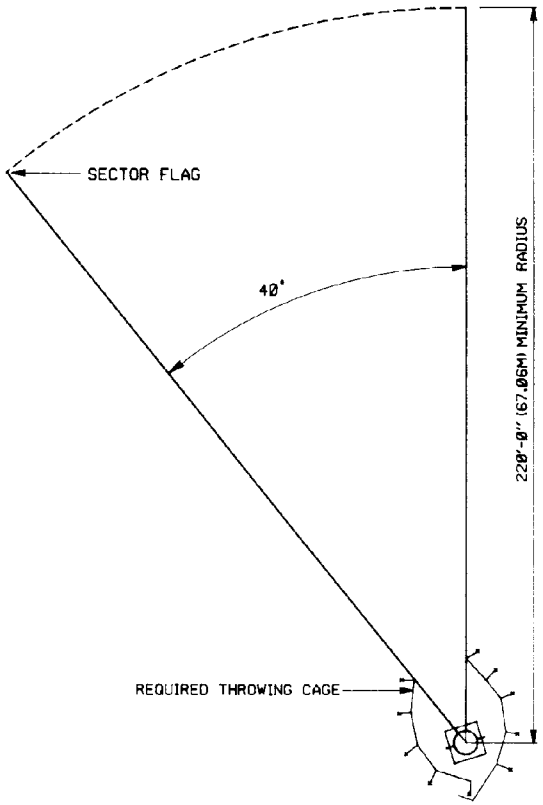


DISCUS THROW CIRCLE



SECTION - DISCUS THROW CIRCLE

Figure C-5. Discus throw.



SECTOR LAYOUT

NOTES:

Sector lines to be white and marked with cloth tape held in place with metal pins or chalk.

For sector flag details see figure C-3.

For throwing cage details see figure C-4.

C-5. Javelin throw (see fig C-6)

a. Source of information. The Athletic Congress.

b. Recommended area. Ground space is 24,000 square feet minimum.

c. Size and dimension. Runway length is minimum 120 feet 0 inch (36.5 m)**.** Runway width is 13 feet 1-1/2 inch (4.0 m). Throwing sector is 30-degree angle with a 300-foot 0-inch (91.5 m) minimum radius.

d. Orientation. Preferred orientation is for the throwing direction to be toward the northeast quadrant.

e. Surface and drainage.

(1) Runway may be turf or specialized bituminous surfacing with a maximum slope of 1 percent (1:100) laterally and 0.1 percent (1:1000) in the running direction.

(2) Throwing sector is to be turf at the same level as the runway behind the throwing arc.

f. Special considerations. Sector flags are required to mark end of landing zone at distance required by the competition.

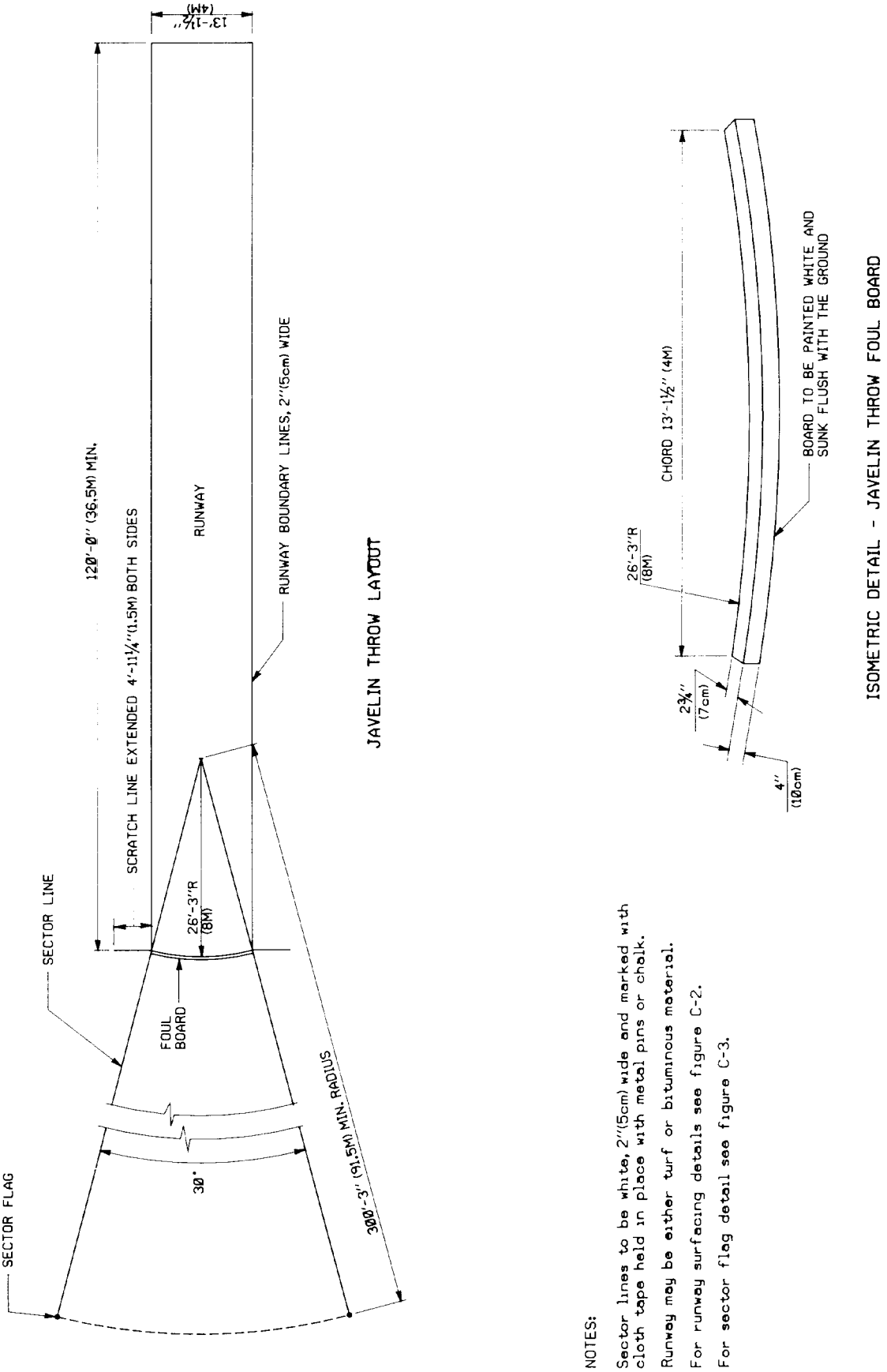


Figure C-6. Javelin throw.

C-6. Long jump and triple jump (see fig C-7)

a. Source of information. The Athletic Congress.

b. Recommended area. Ground space is 1,500 square feet (0.03 acre) minimum.

c. Size and dimension. Runway length is 130 feet 0 inch (36.92 m) minimum. Runway width is 4 feet 0 inch (1.22 m) minimum. Landing pit width is 9 feet 0 inch (2.75 m) minimum. Landing pit length is 32 feet 10 inch (10 m) minimum.

d. Orientation. Preferred orientation is for the running direction to be toward the north or northeast.

e. Surface and drainage.

(1) Runway preferably is to be bituminous material with a hot plant cushion course mix. Protective colorcoating is optional.

(2) Maximum slope is to be 1 percent (1:100) laterally and 0.1 percent (1:1000) in the running direction.

(3) Landing pit is to be sand at the same elevation as the take-off board.

f. Special considerations. Take-off board is to be of wood and must be fixed in the runway.

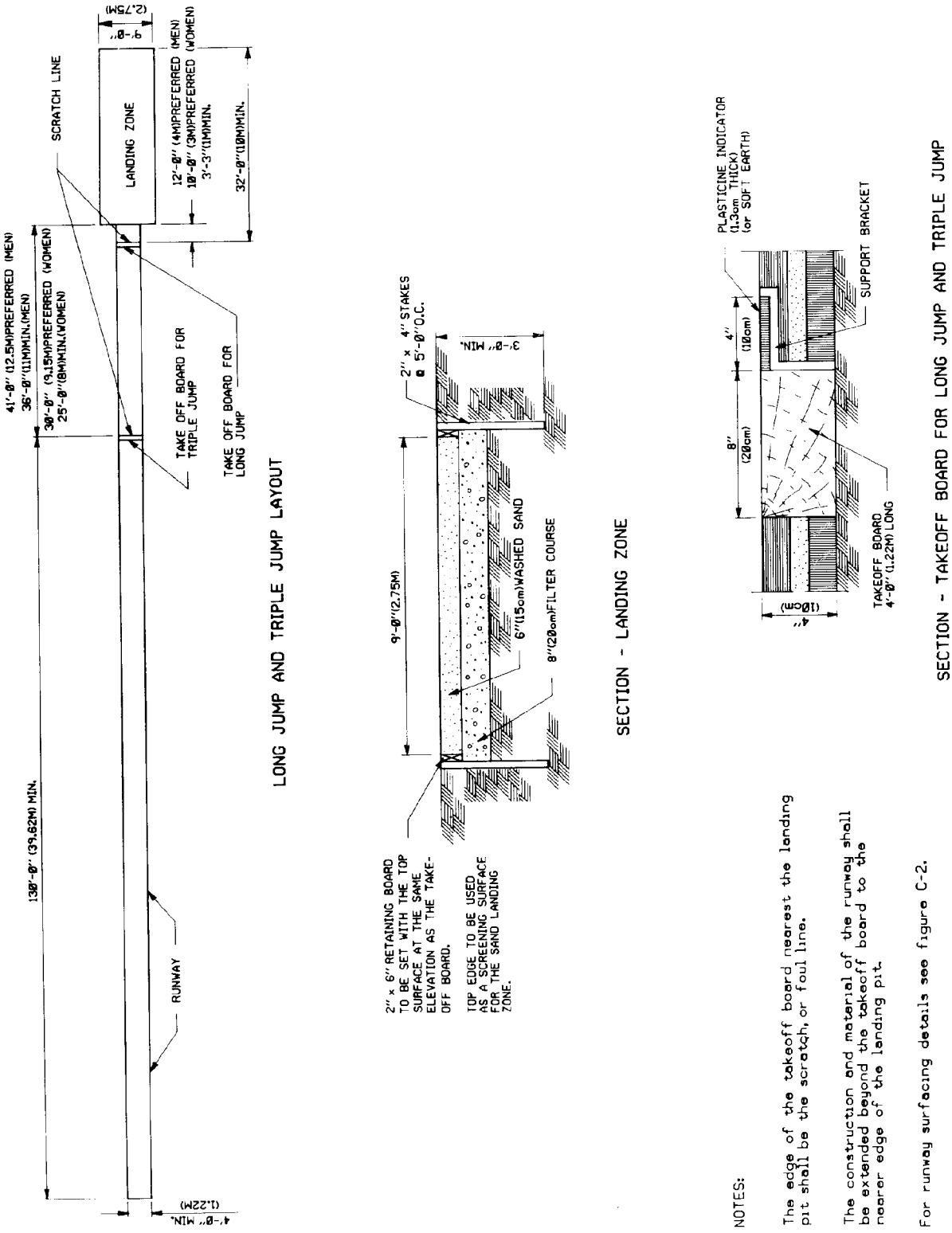


Figure C-7. Long jump and triple jump.

C-7. Pole vault (see fig C-8)

a. Source of information. The Athletic Congress.

b. Recommended area. Ground space is 1,500 square feet minimum.

c. Size and dimension. Runway length is 125 feet 0 inch (38.10 m) minimum. Runway width is 4 feet 0 inch (1.22 m**)** minimum. Vault pit width is 16 feet 0 inch (5 m**)** minimum and depth ranges from 12 feet 0 inch (3.66 m**)** minimum to 16 feet 0 inch (5 m) preferred. Height of material in jumping pit ranges from 18 inches (0.46 m) minimum to 36 inches (0.92 m) preferred, with a connecting apron of the same material and decreasing height around the vaulting box.

d. Orientation. Preferred orientation is for the running direction to be toward the north to east-northeast.

e. Surface and drainage.

(1) Runway preferably is to be bituminous material with a hot plant cushion course mix. Protective colorcoating is optional.

(2) Maximum slope is to be 1 percent (1:100) laterally and 0.1 percent (1:1000) in the running direction.

f. Special considerations. Pole vault box must be fixed in the ground with its entire front edge flush with the front edge of the jumping pit.

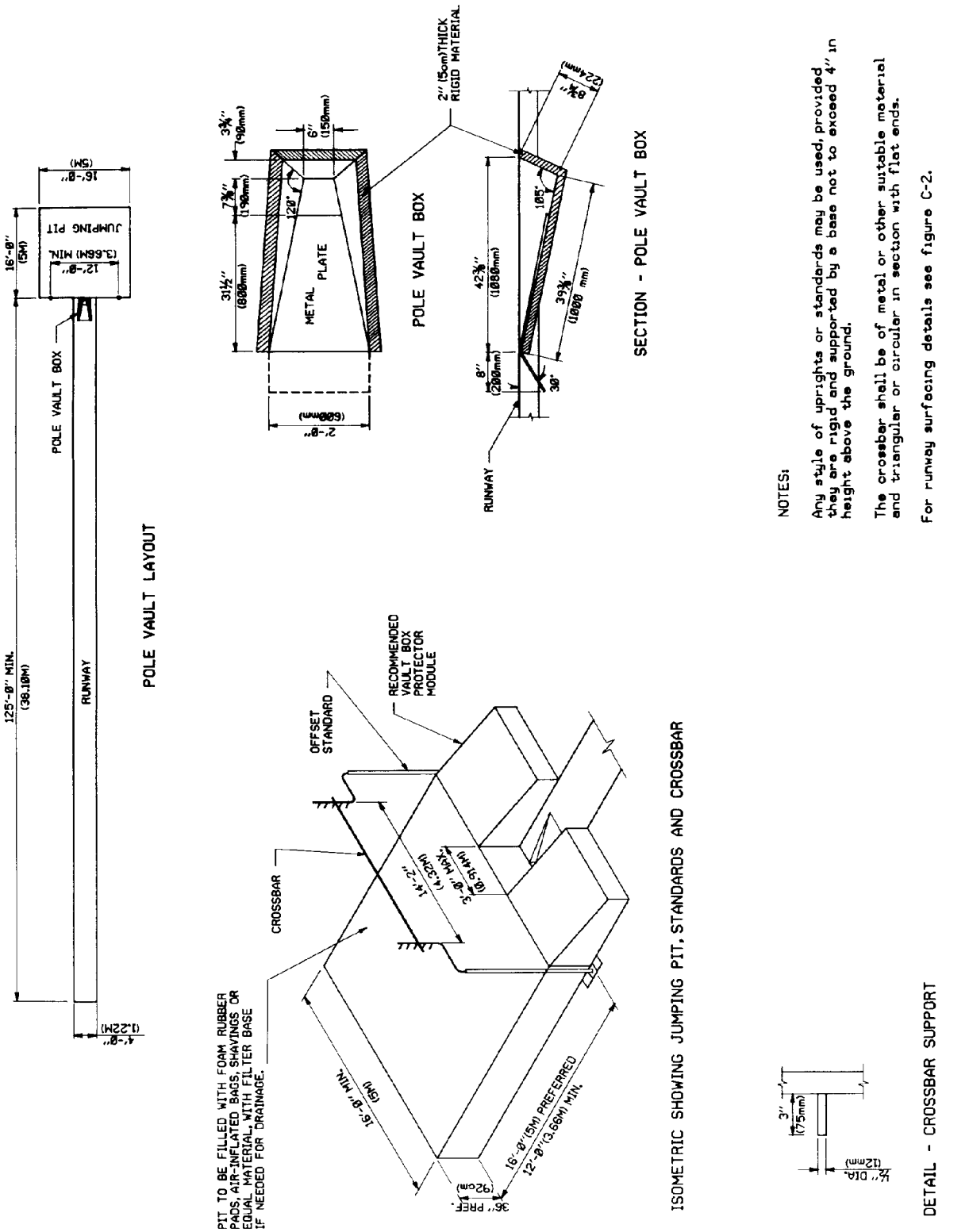


Figure C-8. Pole vault.

C-8. High jump (see fig C-9)

a. Source of information. The Athletic Congress.

b. Recommended area. Ground space is 4,100 square feet (0.09 acre) minimum.

c. Size and dimension. High jump runway is 50 feet (15.24 m) minimum radius and preferably 70 feet (21.3 m**)** radius semi-circle. High jump pit width is 16 feet (5 m) by 8 feet (2.5 m) depth minimum. Height of material in jumping pit is 28 inches (0.7 m) minimum. Take-off area is 10 feet 0 inch (3 m) radius semi-circle with centerpoint directly under center of cross bar, and no point within this area may be higher than the point of measurement.

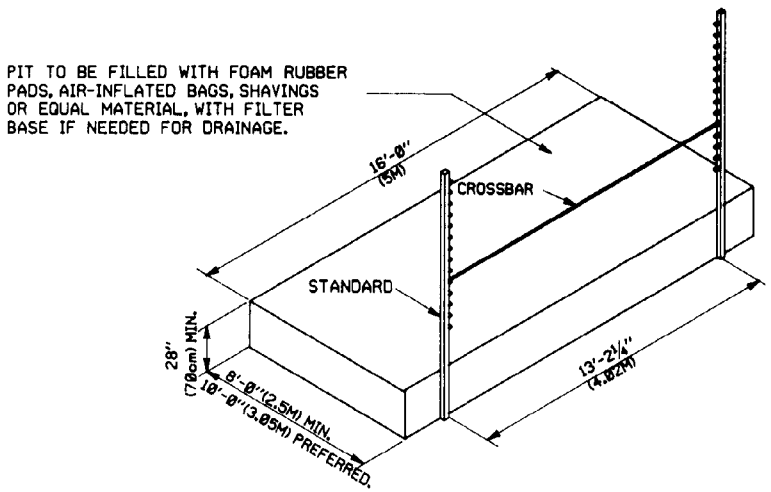
d. Orientation. Preferred orientation is for the direction of jumping to be toward the north to east-northeast.

e. Surface and drainage.

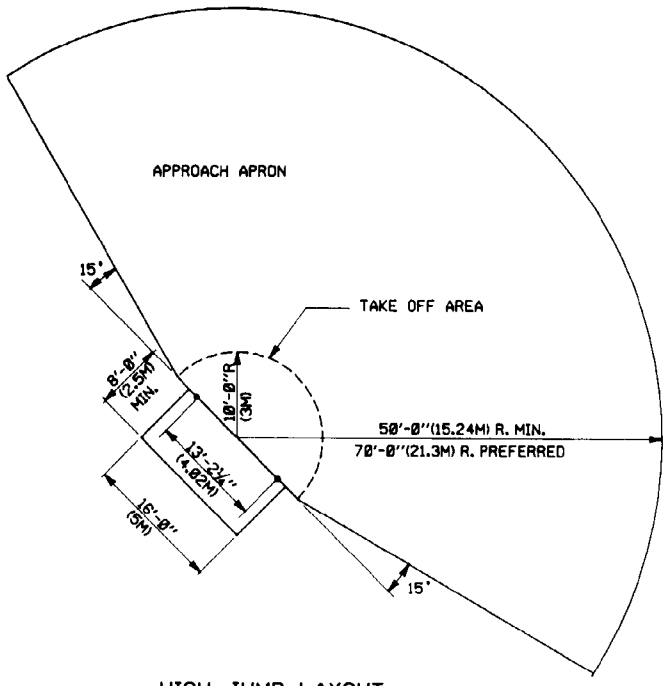
(1) Runway preferably is to be constructed of bituminous material.

(2) Synthetic surface is optional.

(3) Maximum approach apron slope is 1 percent laterally (1:100) and 0.1 percent (1:1000) in the running direction.

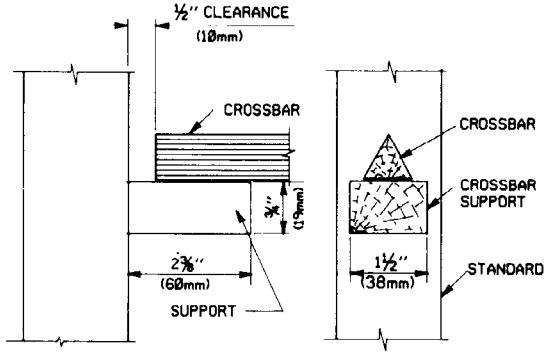


ISOMETRIC SHOWING JUMPING PIT, STANDARDS AND CROSSBAR



HIGH JUMP LAYOUT

Figure C-9. High jump.



CROSSBAR SUPPORT DETAILS

NOTES:

The uprights shall extend at least 4"(100mm) at all heights above the crossbar.

The crossbar shall be of metal or other suitable material and triangular circular in section with flat ends. Length shall be 13'-1½" (4M).

For surfacing details see figure C-2.